

REMARKS

Claims 11-15 and 108-115 are currently pending in this application. Claims 11-15 and 108-115 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 9-11, 14, 17-19, 24 and 41 of U.S. Patent No. 6,734,455 ('455 patent). This rejection is respectfully traversed.

Applicant respectfully submits that the '455 patent is not a valid reference. The present application is a divisional application that claims priority to Application No. 09/809,331 (the '331 application) from which the '455 patent issued. 35 U.S.C. § 121 "prohibits the use of a patent issuing on an application with respect to which a requirement for restriction has been made, or on an application filed as a result of such a requirement, as a reference against any divisional application, if the divisional application is filed before the issuance of the patent." M.P.E.P. § 804.01. The present application was filed on January 16, 2004, prior to the issuance of the '455 patent on May 11, 2004, and in response to an Election Requirement made in the '331 application.

During the prosecution of the '331 application, the examiner issued an Election of Species Requirement dated July 29, 2003, noting that the '331 application contained three patentably distinct species: a) an integrated circuit device prepared by a process comprising at least diffusing a second layer into a first layer to create an integral layer including materials from the first and second layers; b) an integrated circuit device comprising a bottom layer, an active chalcogenide layer formed over the bottom layer, and a top layer, wherein the top layer has an rms surface roughness of less than 140 angstroms; and c) a chalcogenide integrated circuit device comprising a bottom layer; a chalcogenide layer overlying the bottom layer; a metal layer overlying the chalcogenide layer; and a transparent barrier layer atop the metal layer. In response to the Election Requirement in the '331 application, Applicant elected Species b, claims

1-10, 16, 51-61, 77-107 and 116-123, which issued without further amendment. Prior to the issuance of the '455 patent, the present divisional application was filed in response to the Election Requirement. In the present divisional application, Applicant is pursuing Species c, claims 11-15 and 108-115.

The M.P.E.P. § 804.01(B) states that the double patenting rejection under 35 U.S.C. 121 applies when "[t]he claims of the different applications or patents are not consonant with the restriction requirement made by the examiner, since the claims have been changed in material respects from the claims at the time the requirement was made." Alternatively stated, the double patenting rejection under 35 U.S.C. 121 does not apply if the claims of the divisional application are consonant in scope to the original claims subject to restriction in the parent. "In order for the consonance to exist, the line of demarcation between the independent and distinct inventions identified by the examiner in the requirement for restriction must be maintained." M.P.E.P. §804.01(B).

Applicant respectfully submits that the present divisional application has not changed in material respects from the claims at the time the Election Requirement was made during the prosecution of the '331 application, and it remains patentably distinct from the claims in the '455 patent. The present claims are directed to "a chalcogenide integrated circuit device comprising a bottom layer; a chalcogenide layer overlying the bottom layer; a metal layer overlying the chalcogenide layer; and a transparent barrier layer atop the metal layer. " For example, claim 12 recites "[a] structure for creating chalcogenide integrated circuit devices, comprising: a first layer; a chalcogenide layer overlying the first layer; a metal layer overlying the chalcogenide layer; and chalcogenide barrier layer on the metal layer, the barrier layer being essentially transparent to radiation." This is consonant in scope to Species c of the Election

Requirement in the '331 application. In contrast, Claim 1 of the '455 patent claims "[a]n integrated circuit device, comprising: a bottom layer; an active chalcogenide layer formed over the bottom layer, the active layer comprising a dopant material, barrier material, and chalcogenide material; a top layer formed over the active chalcogenide layer, wherein the top layer has an rms surface roughness of less than 140 Å." Claim 1 is consonant in scope to Species b of the Election Requirement in the '331 application. Therefore, the line of demarcation between the independent and distinct inventions identified by the examiner in the Election Requirement of the '331 application is maintained.

For at least these reasons, Applicant respectfully requests the withdrawal of this rejection and the allowance of the pending claims.

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Respectfully submitted,

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